

SCENES AND EXCURSIONS

IN

SWITZERLAND.



DE SAUSSURE'S ASCENT OF MONT BLANC.

CHAPTER I.

SKETCH of Switzerland—Mountainous Character—Glaciers—Avalanches—Lakes—Valleys—History—Social condition—Watch Making—Free Trade—Swiss Melodies—Scenes around Lucerne—Beauty of this region—Lake of Lucerne—The Story of William Tell—Pictorial Bridges—The Swiss Guards—Heroism of Arnold de Winkelreid—Slide of Alpnach—Ascent of the Righi—Extraordinary glory of the view—Catastrophe of Goldau.

SWITZERLAND, in size, is a little less than the two states of Vermont and New Hampshire. It is a very high and rugged country, and is traversed by ramifications of the Alps and Jura mountains. The word *Alp*, signifies a mountain. The immense masses of these mountain regions exhibit a perfect chaos, and present on all sides inaccessible rocks, and everlasting snows. The intervening valleys, however, contain extensive districts, fertile and beautiful, and forming a singular contrast with the mountains that overshadow, and seem ready to overwhelm them. The gradations of animal and vegetable life, are singularly marked at different elevations; and the vine, the oak, the beech, and the fir, rapidly succeed each other, until from

the limits of perpetual snow, animal and vegetable life become gradually more and more dwarfish, and at length give way beneath the blight of inhospitable regions which reach the skies.

At 3,000 feet elevation is the region of glaciers. These remarkable objects are formed exclusively in the highest valleys, where the sun never penetrates. A glacier is defined as a mass of ice hanging on an alpine ridge, or inclosed in one of its valleys, and which is moving continually down its declivity, impelled by its own gravity. Their margins are bounded by roundish blocks of stone, which have been accumulated before them as they advance. The glaciers of Switzerland cover more than 1000 square miles, or about one seventeenth of its entire surface; and it is from these inexhaustible sources that the principal rivers of Europe are supplied with water. The avalanches formed by the accumulated snows rolling down the steep sides of the mountains, are terrific, sometimes overwhelming entire villages. But the "land-slips," are still more serious. These fall, like avalanches, from the sides of the mountains, and consist of masses of earth torn from their beds by the expansive force of freezing. One of the most disastrous of these took place in 1806, when Goldau, and several other villages in the valley of Arth, were overwhelmed by the fall of the earth and stones from the Rossberg. Unlike the Alps, the chain of Jura is clothed from base to summit with luxuriant pine forests. It stretches along the western and north-western frontier, from the Rhone to the Rhine, and nowhere rises to the limit of perpetual snow.

Switzerland is pre-eminently the country of lakes. They are all small, none being over fifty miles long, and a few miles in width. They are generally remarkable for their picturesque beauty. The principal are Constance, Lemman or Geneva, Neufchatel, Lucerne, and Zurich.

Switzerland, called by the Romans *Helvetia*, was celebrated for the valor of its people. During the middle ages it was overrun by a succession of barbarous invaders, and in turn came under the supremacy of Charlemagne, of the House of Burgundy, and finally of the House of Hapsburg, which rendered it an appendage of the German Empire. The violence of Albert of Austria, brought on a crisis. The forest cantons, under the impulse received by the daring courage of William Tell, rose to assert their liberties. A long struggle ensued, but the battle of Morgarten, in which the Austrian forces were completely routed by the mountaineers, secured the independence of Switzerland. A confederacy of thirteen cantons was formed, and the Swiss, engaged in wars among themselves, and with neighboring powers, soon acquired a high military reputation.

In 1815, after the downfall of Napoleon, twenty-two cantons were confederated together for the mutual protection of their liberties and independence. The Diet, which directs the general affairs of the country, is composed of deputies from the cantons, who give their votes under instruction, each canton having one vote. In this legislature is vested the power of making treaties, but the separate cantons may treat with foreign powers in military matters, and for purposes of economy and police, but these treaties must respect the federal compact, and the rights of other cantons. The Diet appoints and recalls diplomatic agents, oversees the general safety, and regu-

lates the military affairs of the federal army. The internal affairs of each canton, are managed by independent local governments, pretty much in the same way as in the United States. Many changes have taken place within the last thirty years, all tending more and more to democracy, and many of the cantons which were of an aristocratic complexion, are now thoroughly democratic.

About seven-tenths of the population are composed of German Swiss, who are generally Protestants, and the French, Italian, Roman, and Swiss (the last named, speaking a language near the Latin), who are for the most part Catholics. The relative numbers are about 1,300,000 Protestants, to 850,000 Catholics. This mixture of races and religions, proves anything but a source of harmony among the Swiss. The Catholics are bigoted, and the Protestants retaliate. Neither allows the other to become citizens of their respective cantons. In some cantons, Catholicism is peremptory, and all the children must be brought up in that faith. Several disturbances have occurred between the rival churches, and much blood flowed on both sides. In 1847, civil war was the result, but the Protestants prevailed, and expelled the Jews, and all monastic orders from the confederation. The Swiss are among the best educated people of Europe. The principal towns in Switzerland are Berne, Basle, Zurich, Lucerne, Lausanne, and Geneva. Berne is generally esteemed the capital; it certainly is one of the most elegant and wealthy of the cities. In the different towns and villages throughout the country, manufactures are carried on to a considerable extent, for home consumption and export. The manufacturing industry of Switzerland, in some measure, takes its tone from the distinctions of race in the population. The Germans engage in the manufacture of iron and machinery, linens, ribbons, silk, cotton, pottery, and some kinds of toys; while the French, from their superior artistic tastes, employ themselves in making watches, jewelry, music boxes, and other elegant objects. Iron of a superior quality is found in one of the cantons; and coal is also dug, but it is of a poor quality, and wood forms the chief fuel. Salt is now made within the canton of Basle, and in the Valais. From the prevalence of rapid running streams, there is an abundance of water-power in almost all quarters.

Geneva and Neufchatel, are the seat of the watch manufacture, a large proportion of the watches being made in hamlets and villages throughout the two cantons. In the long valley, called the Valle Travers, stretching from the neighborhood of Neufchatel to the borders of France, and at Locle, in the same quarter, are numerous small factories of these elegant articles. The existence of a great manufacture in cottages, scattered over fifty miles of mountains, covered some months in the year with snows so deep, as to imprison the inhabitants in their dwellings, is a singular fact in social economy, well worthy of notice. One of the most intelligent of the village watchmakers, presented Dr. Bowring with an interesting account of the origin and progress of this remarkable trade, from which we draw the following passages:

"As early as the seventeenth century, some workmen had constructed wooden clocks, with weights, after the model of the parish clock, which was

placed in the church of Locle in the year 1630. But no idea had as yet been conceived of making clocks with springs. It was only about the latter end of the same century, that an inhabitant of these mountains, having returned from a long voyage, brought back with him a watch, an object which was, till that time, unknown in the country. Being obliged to have his watch repaired, he carried it to a mechanic, named Richard, who had the reputation of being a skillful workman.

Richard succeeded in repairing the watch, and having attentively examined its mechanism, conceived the idea of constructing a similar article. By dint of labor and perseverance, he at length succeeded, though not without having had great difficulties to surmount, and he was compelled to construct all the different movements of the watch, and even to manufacture some ill-finished tools, in order to assist him in his labors. When this undertaking was completed, it created a great sensation in the country, and excited the emulation of several men of genius, to imitate the example of their fellow-citizen; and thus, very fortunately, watch-making was gradually introduced among our mountains, the inhabitants of which had, hitherto, exercised no other trade or profession, than those which were strictly necessary to their daily wants; their time being principally employed in cultivating an ungrateful and unproductive soil. Our mountaineers were frequently compelled, before the introduction of the above-named industry, to seek for work during the summer months, among the people of the surrounding country. They rejoined their families in the winter, being enabled, from their economical savings, the moderateness of their wants, and the produce of a small portion of land, to supply themselves with the necessaries of life. And it must be remarked, also, that the entire liberty which they enjoyed, united to the absence of any description of taxation, greatly tended to relieve the hardships of their lot.

For a number of years, those who betook themselves to watch-making, were placed at a great disadvantage, by having to import their tools, but these, they in time learned to make, and greatly improve upon. In proportion as men embraced the profession of watch-making, the art became more developed; several returned from Paris, where they had gone to perfect themselves, and contributed, by their knowledge, to advance the general skill. It is not more than eighty or ninety years since a few merchants began to collect together small parcels of watches, in order to sell them in foreign markets. The success which attended these speculations, induced and encouraged the population of these countries to devote themselves still more to the production of articles of ready sale; so much so, that very nearly the whole population has, with a very few exceptions, embraced the watch-making trade. Meanwhile, the population has increased three-fold, independently of the great number of workmen who are established in almost all the towns of Europe, in the United States, and even in the East Indies, and China. It is from this period, also, that dates the change which has taken place in the country of Neufchatel, where, notwithstanding the barrenness of the soil, and the severity of the climate, beautiful, and well-built villages are everywhere to be seen, connected by easy communications, together with a very

considerable and industrious population, in the enjoyment, if not of great fortunes, at least, of a happy and easy independence.

Thus, in defiance of the difficulties which it was necessary to overcome, in spite of the obstacles which were opposed to the introduction of the produce of our industry into other countries, and notwithstanding the prohibitions which enfeebled its development, it has, at length, attained a prodigious extension. It may be further remarked, that from the upper valleys of Neufchatel, where it originated, it has spread from east to west, into the valleys of the Jura, and into the cantons of Berne and Vaud; and further, that all these populations, form at present, a single and united manufactory, whose center and principal focus, is in the mountains of Neufchatel."

The manufacture of wooden toys, such as small carved figures and boxes, is also carried on in the mountainous parts of Switzerland, many of the rural laborers employing themselves on these articles, at leisure hours, and particularly during the winter season, when out-door labor is stopped. Among the hills near Unterseen, and Interlaken, we have observed a number of these interesting domestic manufactories, by which, at little cost, many comforts are procured.

Appenzell takes the lead in cotton manufactures, and Zurich, in the spinning and weaving of silk. It is most extraordinary, how the manufacture of these bulky articles should prosper, considering the distance of the country from the sea. Surrounded by hostile, or at least, rival and jealous neighbors, and with a long land carriage, on which heavy tolls are imposed, to and from seaports, the Swiss still contrive to carry on a successful foreign trade, and even out-do the French and Germans, in point of skill and cheapness. The whole social condition of the Swiss is curious. The bulk of the country is divided into small possessions, each cultivated or superintended by its proprietor. There are few persons with large estates; and "landed gentlemen," as they are termed in England, are almost unknown. The rural population, therefore, whether agriculturists, in the valleys or plains, or sheep, or neat-herds, among the hills, are, for the greater part, only a superior kind of peasants, few of whom possess the wealth or comforts of modern Scotch farmers. In some districts the people unite the character of agriculturists and artisans. On certain days or seasons, or at certain hours, they work on their little farms, and the rest of the time is employed in weaving, toy-making, or in some other handicraft. Instead of confining themselves to towns, the Swiss operatives prefer working in villages, or in cottages, scattered on the face of the hills; for there they are near the gardens or fields, which they delight in cultivating, and there they can unexpensively keep a cow, goat, or pig. A great number have goats, for the sake of the milk, and because their keep is next to nothing, in the way of outlay.

The diligence with which the families of Swiss workmen pursue their labors in and out of doors at these rural retreats, is spoken of by all travelers as a kind of wonder; and in the neighborhood of Zurich, it appears in its most captivating form. Wandering up the slopes of the hills, we perceive numerous clusters of cottages, inhabited principally by weavers, from which

the sound of the shuttle is heard to proceed. Here, as elsewhere, the cottages are chiefly of wood, but substantial, and are generally ornamented with vines clinging to the picturesque eaves of the roof. All around are patches of gardens, or small inclosed fields, sufficient, probably, to pasture one or two goats, with some ground under crops of potatoes. Industry is everywhere observable. If the husband is at the loom, his wife is out of doors at the potatoe ridges, a girl is winding bobbins, and a boy is attending the goats. Baby leads the only sinecure life, and is seen sprawling at his ease on a cushion laid on the ground, at a short distance from the mother. The people in this way are constantly at work. They may be seen laboring in the fields before sunrise, and after sunset. With all their labor, in and out of doors, families do not realize above eight or nine shillings each, weekly. Provisions are cheaper than in England, and the taxes are few and light; but with these advantages in their favor, the Swiss do not realize so high a remuneration as English operatives. Yet with their few shillings weekly, they are better off than workmen in England, because they are exceedingly economical. The Swiss operative employs his spare hours, in making his own or his children's clothes, and his wife and children are all productive in some humble way; so that, being frugal and easily contented, the family is never ill off. All contrive to save something. With their savings they build or buy a cottage, and purchase a piece of ground, and to attain this amount of riches—to have this substantial stake in the country—is their highest ambition.

The most remarkable point in the social economy of Switzerland, is the universal principle of freedom in trade, in which respect it has no parallel on the face of the earth. A free export and import are permitted. The government has no custom-house establishment, either in reference to the general frontiers or the frontiers of the respective states; the only impediment to the transport of goods, in any direction, is the exaction of tolls, at the rate of about one penny per hundred weight, for the benefit of the cantonal revenues, from which, however, the roads are kept in repair.

All restrictions on the importations of articles from other countries being thus removed, it might be supposed by some, that the country would be deluged with foreign manufactures, greatly to the injury of native capitalists and workmen. But this does not appear to be the case. In several branches of manufacture the Swiss excel; and the opportunity of buying certain kinds of foreign produce, at a particularly cheap rate, enables the people to encourage the growth of other manufactures in their own country. The peasant who buys an English-made knife at half what he could buy a Swiss one for, has a half of his money remaining, wherewith to purchase a native-made ribbon; hence Swiss manufactures of one kind or other, are sure to be encouraged.

Switzerland is celebrated for a class of melodies called the *Ranz de Vaches*, which are peculiar to her Alpine valleys. Almost every valley has an air of its own, but the original air is said to be that of Appenzell. Their effect in producing home sickness in the heart of the Swiss mountainer, when

heard in a distant land, and the prohibition of this music in the Swiss regiments in the service of France, on account of the number of deserters occasioned by it, is well known.

These national airs are particularly wild in their character, yet full of melody; the choruses consist of a few remarkable shrill notes, uttered with a peculiar falsetto intonation in the throat. They originate in the practice of the shepherds on the Alps, of communicating with another at the distance of a mile or more, by pitching the voice high. The name, "*Ranz de Vaches*," signifying "cow rows," is derived from the order in which the cows march home at milking time, in obedience to the shepherd's call, communicated by the voice or through the *Alp-horn*: this is a simple tube of wood, wound round with bark, five or six feet long, admitting of but slight modulation, yet very melodious when caught up and prolonged by the mountain echoes.

In some of the remoter pastoral districts of Switzerland, from which the ancient simplicity of manners is not altogether banished, the *Alp-horn* supplies, in the higher pastures, where no church is near, the place of the vesper bell. The cowherd, posted on the highest peak, as soon as the sun has set, pours forth the first four or five notes of the psalm, "Praise God the Lord." the same notes are repeated from distant Alps, and all within hearing, uncovering their heads and bending their knees, repeat their evening orison, after which the cattle are penned in their stalls, and the shepherds betake themselves to rest.

The traveler among the Alps, will have frequent opportunities of hearing, both the music of the horn, and the songs of the cowherds and dairy-maids; the latter have been thus described by Southey: "Surely the wildest chorus that ever was heard by human ears, a song, not of articulate sounds, but in which the voice is used as mere instrument of music, more flexible than any which art could produce, sweet, powerful, and thrilling beyond description."

The region about the Lake of Lucerne is one of the most interesting in Switzerland, and the lake itself the finest in the country. It is called the Lake of the Four Cantons—Uri, Schwytz, Unterwalden, and Lucerne, which it laves, and is the geographical and historical center of Switzerland. It was here that occurred those heroic scenes, which have associated the name of Tell, with those of Wallace and Washington, as the preservers of their respective countries, from the grasp of foreign tyrants. Not much is really known of this patriot, but the little that has been wafted by history and tradition, to our times, is interesting, and possesses all the charms of poetry and romance. This Swiss hero was born in the canton of Uri, near the Lake of Lucerne, about the year 1275, and was, by profession, a farmer.

The ancient city of Lucerne is beautifully situated, with the lake on the south-east. A fertile country lies in its rear and on both sides, while Mount Pilate rises in grand gloom on its right, and the Righi mountain, with its cheerful verdure, in front.

The great curiosity of Lucerne are its two bridges over the Reuss. One of them called the Cathedral bridge, thirteen hundred and eighty feet in length, is hung with two hundred and forty pictures, representing the whole Scripture history: scenes from the Old Testament are arranged on one side, and sub-

tiously displaying an extensive supply of rope wherewith to hang the chiefs of the rebels—a hasty reckoning of victory, which reminds us of similar conduct and similar results when Wallace repulsed the invaders of Scotland.

The confederates, in whose ranks were William Tell and Furst, in order to oppose this formidable invasion, occupied a position in the mountains bordering on the convent of our Lady of the Hermits. Four hundred men of Uri, and three hundred of Unterwalden, had effected a junction with the warriors of Schwytz, who formed the principal numerical force of this little army. Fifty men, banished from this latter canton, offered themselves to combat beneath their native banner, intending to efface, by their valor and conduct, the remembrance of their past faults. Early on the morning of the 15th of November, 1315, some thousands of well-armed Austrian knights slowly ascended the hill on which the Swiss were posted, with the hope of dislodging them; the latter, however, advanced to meet their enemies, uttering the most terrific cries. The band of banished men, having precipitated huge stones and fragments of rocks from the hill-sides, and from overhanging cliffs, rushed from behind the sheltering influence of a thick fog, and threw the advancing host into confusion. The Austrians immediately broke their ranks, and presently a complete route, with terrible slaughter, ensued. The confederates marched boldly on, cheered by the voice and example of Henry of Ospenthal, and one of the sons of old Redding of Biberegg.

The flower of the Austrian chivalry perished on the field of Morgarten, beneath the halberts, arrows, and iron-headed clubs of the shepherds. Leopold himself, though he succeeded in gaining the shattered remnant of his forces, had a narrow escape; while the Swiss, animated by victory, hastened to Unterwalden, where they defeated a body of Lucernois and Austrians. In this instance Count Otho had as narrow an escape as the emperor. After these two well-fought fields, the confederates hastened to renew their ancient alliance, which was solemnly sworn to in an assembly held at Brunnen on the 8th day of December.

All that remains to be told of the Swiss hero's life is the immemorial tradition, that William Tell, the same who shot Gessler in 1307, assisted at a general meeting of the commune of Uri in 1337, and perished in 1350 by an inundation which destroyed the village of Bürglen, his birthplace. According to Klingenberg's chronicle, however, written toward the close of the fourteenth century, when many of his cotemporaries were still living, Wilhelmus Tellus of Uri, as he calls him, the liberator of his country, became, after the battle of Morgarten, administrator of the affairs of the church of Beringer, where he died in 1354."

The ancient city of Lucerne is beautifully situated, with the lake on the south-east. A fertile country lies in its rear, and on both sides, while Mount Pilate rises in grand gloom on its right, and the Righi mountain, with its cheerful verdure in front.

The great curiosity of Lucerne are its two bridges over the Reuss. One of them, called the Cathedral bridge, thirteen hundred and eighty feet in length, is hung with two hundred and forty pictures, representing the whole Scripture history: scenes from the Old Testament are arranged on one side, and sub

jects from the new, on the other. The other bridge is hung with oil paintings, representing all the heroic events in Swiss history. In a garden near the town is a monument, designed by Thorswalden, to the memory of the Swiss guards, who fell in defending the Tuilleries, on the 10th of August, 1792. It is hewn out of solid rock, and represents a lion dying, wounded by an arrow, and seeming in the agonies of death, to protect the Bourbon fleur-de-lis. The figure is twenty-eight feet long, and eighteen high. It bears the inscription "*Helvetiorum fidei ac virtuti.*" i. e. "To the faith and virtue of the Helvetians," together with the names of the brave officers and men who fell on that bloody occasion, while faithfully defending a feeble and unworthy master.

In the town arsenal are relics of the ancient heroism of Switzerland, among which is the sword of William Tell, and a statue of Arnold de Winkelreid, of Unterwalden. The name of Winkelreid is associated with an amazing act of heroic self-sacrifice, one unequaled in the whole range of modern history.

At the battle of Sempach, the Austrian hosts, four to one of the Swiss, had long withstood their attacks, when Winkelreid exclaimed, "I will open you a passage, only protect my wife and children! then springing forward, he seized in both arms, as many of the enemy's spears as he was able, buried them in his body, and sank to the ground, while his companions rushed forward to victory through the breach over his dead body!

Mount Pilate occupying a point beyond the termination of the Alpnach arm of the Lake of Lucerne, is, in many respects, an interesting mountain. There is a small lake near its summit, which Pontius Pilate, who is said to have resided in Switzerland, after he was banished by Tiberias into Gaul, stung with remorse, plunged into, and perished.

Upon this mountain was constructed, many years ago, a great and useful work, the slide of Alpnach, for facilitating the descent of timber.

On the south side of Pilatus are great forests of spruce fir, consisting of the finest timber, but in a situation which the height, the steepness, and the ruggedness of the ground, seemed to render inaccessible. They had rarely been visited but by the chamois hunters, and it was from them, indeed, that the first information concerning the size of the trees, and the extent of the forest appears to have been received. These woods are in the canton of Unterwalden, where there are no manufactures, little accumulation of capital, and no commercial enterprise. In the possession of such masters, the lofty firs of Pilatus were likely to remain long the ornaments of their mountains.

Mr. Rupp, however, a native of Wirtemberg, and a skillful engineer, in which profession he had been educated, indignant at the political changes effected in his own country, was induced to take refuge among a free people, and came to settle in the canton of Schwytz, on the opposite side of the Lake of Lucerne. The accounts which he heard there of the forest just mentioned, determined him to visit it, and he was so much struck by its appearance, that long and rugged as the descent was, he conceived the bold project of bringing down the trees, by no other force than their own weight, into the Lake of Lucerne, from whence the conveyance to the German ocean was easy and expeditious. A more accurate survey of the ground convinced him of the practicability of the project.

He had by this time resided long enough in Switzerland, to have both his talents and integrity in such estimation, that he was able to prevail on a number of the proprietors to form a company, with a joint stock, to be laid out in the purchase of the forest, and in the construction of the road along which it was intended that the trees should slide down into the lake of Lucerne, the arm of which, fortunately, approaches quite near to the bottom of the mountain. The sum required for this purpose was very considerable for that country, amounting to nine or ten thousand pounds; three thousand pounds to be laid out in the purchase of the forest from the community of Alpnach, the proprietors of it, and the rest being necessary for the construction of the singular railway by which the trees were to be brought down.

The distance which the trees had to be conveyed is forty-six thousand feet. The horizontal distance just mentioned is forty-four thousand two hundred and fifty-two feet—eight English miles and about three furlongs. The declivity is, therefore, one foot in 1768; the medium angle of elevation $3^{\circ} 14' 20''$.

This declivity, though so moderate on the whole, was in many places very rapid. At the beginning the inclination was about one-fourth of a right angle, or about $22^{\circ} 30'$; in many places, 20° , but nowhere greater than the angle first mentioned, $22^{\circ} 30'$. The inclination continued of this quantity for about 500 feet, after which the way was less steep, and often considerably circuitous, according to the directions which the ruggedness of the ground forced it to take.

Along this line the trees descended in a sort of trough built in a cradle form, and extending from the forest to the edge of the lake. Three trees squared, and laid side by side, formed the bottom of the trough; the tree in the middle having its surface hollowed, so that a rill of water, received from distance to distance, over the side of the trough, might be conveyed along the bottom, and preserve it moist. Adjoining to the central part (of the trough), other trees, also squared, were laid parallel to the former, in such a manner as to form a trough rounded in the interior, and of such dimensions as to allow the largest trees to lie, or to move quite readily. When the direction of the trough turned, or had any bending, of which there were many, its sides were made higher and stronger, especially on the convex side, or that from which it bent, so as to provide against the trees bolting or flying out, which they sometimes did, in spite of every precaution. In general, the trough was from five to six feet wide at top, and from three to four in depth; varying, however, in different places, according to circumstances.

This singular road was constructed at considerable expense; though, as it went almost for its whole length through a forest, the materials of construction were at hand, and of small value. It contained 30,000 trees; was in general supported on cross timbers, that were themselves supported by uprights fixed in the ground. It crossed in its way three great ravines; one at the height of sixty-four feet, another at the height of one hundred and three, and a third, where it went along the face of a rock, at that of 157. In two places it was conveyed under ground. It was finished in 1812.

The trees which descend by this conveyance were spruce-firs, very straight, and of great size. All their branches were lopped off, stripped of the bark

and the surface, of course, made tolerably smooth. The trees or logs, of which the trough was built, were dressed with the ax, but without much care.

All being thus prepared, the tree was launched with the root end foremost, into the steep part of the trough, and in a few seconds acquired such a velocity as enabled it to reach the lake in the short space of six minutes; a result altogether astonishing, when it is considered that the distance is more than eight miles, that the average declivity is but one foot in seventeen, and that the route which the trees have to follow is often circuitous, and in some places almost horizontal.

Where large bodies are moved with such velocity as has now been described, and so tremendous a force of course produced, everything had need to be done with the utmost regularity, every obstacle carefully removed, that can obstruct the motion, or that might suffer by so awful a collision. Everything, accordingly, with regard to launching off the trees, was directed by telegraphic signals. All along the slide, men were stationed at different distances, from half a mile to three quarters, or more, but so that every station might be seen from the next, both above and below. At each of these stations also, was a telegraph, consisting of a large board like a door, that turned at its middle, on a horizontal axle. When the tree was launched from the top, a signal was made by turning the board upright, the same was followed by the rest, and thus the information is conveyed, almost instantaneously, all along the slide, that a tree was on its way. By-and-by, to any one that is stationed on the side, even to those at a great distance, the same was announced by the roaring of the tree itself, which became always louder and louder; the tree came in sight, when it was perhaps half a mile distant, and in an instant after shot past, with the noise of thunder and the rapidity of lightning. As soon as it had reached the bottom, the lowest telegraph was turned down, the signal passed along all the stations, and the workmen at the top were informed that the tree had arrived in safety. Another was set off as quickly as possible, the moment was announced as before, and the same process repeated, till the trees that had been got in readiness for that day had been sent down into the lake.

The trees thus brought down into the Lake of Lucerne were formed into rafts, and floated down the very rapid stream of the Reuss, by which the lake discharges its water, first into the Aar, and then into the Rhine. By this conveyance, which is all of it in streams of great rapidity, the trees sometimes reached Basle in a few days after they had left Lucerne, and there the intermediate concern of the Alpach company terminated. They still continued to be navigated down the Rhine in rafts, to Holland, and were afloat in the German ocean, in less than a month from having descended from the side of the Pilatus, a very inland mountain, not less than a thousand miles distant. The Emperor Napoleon, had made a contract for all the timber thus brought down. This useful work has since been taken down.

If you are favored with a fine clear sunrise, then, of all excursions from Lucerne, that to the summit of the Righi is unrivaled in the world for its beauty.

We made our ascent, says the Rev. George. B. Cheever, in his *Wanderings of a Pilgrim*, in the afternoon, so as to be upon the mountain by night, already ready for the morning's glorious spectacle.

The sunset was one of extraordinary splendor, as regards the clouds and their coloring in the golden west, and we enjoyed also a very extensive view, but not *the* view.

The brow of the mountain is as perpendicular as Arthur's Crag at Edinburgh, almost cresting over like the sea-surf or a wave in mid-ocean. In the evening, walking along the edge of the precipice, the vast scene is of a deep and solemn beauty, though you are waiting for the dawn to reveal its several features. The lights in so many villages far below, over so great an extent, produce a wild and magic picturesqueness. There at our left is Lucerne, here at our feet is Kussnacht; a few steps to the right, and Arth is below you, with many glancing lights in the surrounding chalets. The evening church bells are ringing, and the sound comes undulating upward, so deep, so musical. There is no moon, but the stars are out, and methinks they look much brighter, more startling, more earnest, than they do from the world below. How far above that world! How pure and still the air around us.

The summit where we are is called the *culm* of the Righi, because it is the *culminating*, or highest point, running, with a turf-covered slope, to the wave-like summit. A few steps down the slope stands the little inn, with a second rough lodging-house below, though the accommodations are insufficient for the crowd of sleepers waiting for the sun.

We slept little and unquietly, and we rose while the stars were still bright, but beginning to pale a little in the east with the breaking light of day; and no man who has not been in the same situation can tell the delight with which we threw open the windows, and found a clear, fresh, glorious morning. The sentinel of the dawn, for the sleepers in the inn, seized his long wooden horn, and blew a blast, in-doors and out, to waken them, and then, one after another emerged into the open air, and hastened to the top of the mountain, to watch the movements of the sun.

It was the sixth of September, and the most perfectly beautiful morning that can be imagined. At a quarter past three, the stars were reigning supreme in the heavens, with just enough of the old moon left to make a trail of light in the shape of a little silver boat among them. But speedily the horizon began to redden over the eastern range of mountains, and then the dawn stole on in such a succession of deepening tints, that nothing but the hues of the preceding sunset could be more beautiful. But this is the great difference between the sunrise and sunset, that the hues of sunset are every moment deepening as you look upon them, until again they fade into the darkness; while those of the sunrise gradually fade into the light of day. It is difficult to say which process is most beautiful; for, if you could make everything stand still around you, if you could stereotype or stay the process for an hour, you could not tell whether it were the morning dawn or the evening twilight.

A few long, thin strips of fleecy clouds lay motionless above the eastern horizon, like layers of silver lace, dipped first in crimson, then in gold, then

in pink, then lined with an ermine of light, just as if the moon had been lengthened in soft furrows along the sky. This scene in the east attracts every eye at first, but it is not here that *the* glory of the view is to be looked for. This glory is in that part of the horizon on which the sun first falls, as he struggles up behind the mountains to flood the world with light. And the reason why it is so glorious, is, because, long before you call it sunrise in the east, he lights up in the west, a range of colossal pyres, that look like blazing crescents, kindled from the sky, and fed with naphtha.

The object most conspicuous, as the dawn broke, and, indeed the most sublimely beautiful, was the vast enormous range of the snowy mountains of Oberland, without spot or vail of cloud or mist to dim them, the Finsteraarhorn at the left, and the Jungfrau and Silberhorn at the right, peak after peak, and mass after mass, glittering with a cold, wintery whiteness in the gray dawn. Almost the exact half of the circumference of the horizon, commanded before and behind in our view, was filled with these masses of snow and ice ; then, lower down, the mountains of bare rock, and, lower still, the earth, with mounts of verdure ; and this section of the horizontal circumference, which is filled with the vast ranges of the Oberland Alps, being almost due west from the sun's first appearance, it is on their tops that the rising rays first strike.

This was the scene for which we watched, and it seems as if nothing in nature can ever again be so beautiful. It was as if an angel had flown round the horizon of mountain ranges, and lighted up each of their white pyramidal points in succession, like a row of gigantic lamps, burning with rosy fires. Just as the sun suddenly tipped the highest points and lines of the snowy outline, and then, descending lower on the body of the mountains, it was as if an invisible omnipotent hand had taken them, and dipped the whole range in a glowing pink ; the line between the cold snow, untouched by the sunlight, and the warm roseate hue above, remaining perfectly distinct. This effect continued some minutes, becoming, up to a certain point, more and more beautiful.

We were like children in a dark room, watching for the lighting up of some great transparency.

It was as if we witnessed some supernatural revelation, where mighty spirits were the actors between earth and heaven :

" With such ravishing delight
And mantling crimson, in transparent air,
The splendor shot before us."

And yet, a devout soul might have almost felt, seeing those fires kindled as on the altars of God made visible, as if it heard the voices of seraphim crying, holy, holy, holy is the Lord of Hosts, the whole earth is full of his glory !—for, indeed, the vision was so radiant, so full of sudden, vast, unimaginable beauty and splendor, that methinks a phalanx of the sons of God, who might have been passing at that moment, could not have helped stopping and shouting for joy, as on the morning of the creation.

This was the transient view, which, to behold, one might well undertake a

voyage across the Atlantic: of a glory and a beauty indescribable, and nowhere else in the world to be enjoyed, and here only in perfect weather. After these few moments, when the sun rose so high, that the whole masses of snow upon the mountain ranges were lighted with the same rosy light, it grew rapidly fainter, till you could no longer distinguish the deep, exquisite pink and rosy hues, by means of their previous contrast with the cold white. Next, the sun's rays fell upon the bare, rocky peaks, where there was neither snow nor vegetation, making them shine like jasper, and next on the forest and grassy slopes, and so down into the deep bosom of the vales. The pyramidal shadow cast by the Righi mountain was most distinct and beautiful, but the atmospheric phenomenon of the specter of the Righi was not visible.

This amazing panorama is said to extend over a circumference of 300 miles. In all this region, when the upper-glory of the heavens and mountain-peaks has ceased playing, then, as the sun gets higher, forests, lakes, hills, rivers, trees, and villages, at first indistinct and gray, in shadows, become flooded with sunshine, and almost seem floating up toward you. There was, for us, another feature of the view, constituting by itself, one of the most novel and charming sights of Swiss scenery, but which does not always accompany the panorama of the Righi, even in a fine morning. On earth, the morning may be too fine. This was the soft, smooth, white body of mist, lying on most of the lakes, and on the vales, a sea of mist, floating, or rather, brooding, like a white dove, over the landscape. The spots of land at first visible in the midst of it, were just like islands, half emerging to the view. It lay over the bay of Kussnacht, at our feet, like the white robe of an infant in the cradle, but the greater part of the Lake of Lucerne was sleeping quietly without it, as an undressed babe. Over the whole of the Lake of Zug, the mist was at first motionless, but in the breath of the morning, it began slowly to move altogether toward the west, disclosing the village of Arth, and the verdurous borders of the lake, and then uncovering its deep sea-green waters, which reflected the lovely sailing shadows of the clouds as a mirror.

Now the church-bells began to chime under this body of mist, and voices from the invisible villages, mingled with the tinkle of sheep-bells, and the various stir of life awakening from sleep, came stilly up the mountain, and now, some of the mountain-peaks, themselves, began suddenly to be touched with fleeces of clouds, as if smoking with incense in morning worship. Detachments begin, also, to rise from the lakes and valleys, moving from the main body up into the air. The villages, châteaux, and white roads, dotting and threading the vast circumference of the landscape, come next into view; and now, on the Lake of Zug, you may see reflected the shadows of clouds, that have risen to the surface, but are, themselves, below us.

It is said you can see fourteen lakes from the place where we are standing; I counted at least twelve, last evening, before the night-vail of the mist had been drawn over them, but this morning, the goings-on in the heavens, have been too beautiful and grand, to take time for counting them. On the side of the Righi, under the eastern horizon, you behold the little Lake of Lowertz, with the ruins of the village of Goldau, destroyed by the slide of the

Rossherg, and you trace distinctly, the path of the destroying avalanche, the vast groove of bare rock, where the mountain separated, and thundered down the vale. A little beyond are the beautiful parks of Schwytz, called the Miters.

All this wondrous panorama is before us. Whatever side we turn, new points of beauty are disclosed. As the day advances, every image, fully defined, draws to its perfect place in the picture. A cloudless noon, with its still solemnity, would make visible, for a short time, every height and depth, every lake, mountain, town, streamlet, and village, that the eye could reach, from this position, and then would pass again the lovely, successive transitions of shade deepening into shade, and colors richer burning, into the blaze of sunset, and the soft melancholy twilight, till nothing could be seen from our high position, but the stars in heaven. In a few hours, we have witnessed, as on a central observatory, what the poet Young calls—

——“ the astonishing magnificence
of unintelligible creation,”

from the numerous worlds that throng the firmament at midnight—

Where depth, height, breadth,
Are lost in their extremes, and where to count
The thick-sown glories in this field of fire,
Perhaps a seraph's computation fails,”

to the beauty and sublimity of our own small world revealed, when theirs is hidden, in the break of dawn, and revealed with such an array of morning splendor, that not even height, and the universe of stars, can be, for the moment, a more entertaining spectacle !

And for whom hath God arranged all this ? Not for the angels alone, but for every eye that looks to him in love, for the humblest mind and heart that can look abroad and say, “ My Father made them all ! He made them, that his children might love him in them, and know him by them.”

From the summit of the Rhigi, one overlooks the beautiful Rossherg mountain, a scene of a dreadful catastrophe, only a few years ago—an avalanche, by which three or four lovely villages were overwhelmed in one vast burial, and four hundred and fifty-seven persons perished.

The place out of which it broke, in the mountain, is a thousand feet in breadth, by a hundred feet deep, and this falling mass extended bodily, for three miles in length. It shot across the valley with the swiftness of a cannon-ball, so that in five minutes, the villages were all crushed, as if they had been egg-shells, or the mimic toys of children. And when the people looked toward the luxuriant vale, where the towns had lain, smiling and secure, the whole region was a mass of smoking ruins.

But this history ought not to be related in any other language than the simple and powerful narrative of Dr. Zay, of the neighboring village of Arth, an eye-witness of the whole spectacle :

“ The summer of 1806,” says he, “ had been very rainy, and on the first and second of September, it rained incessantly. New crevices were observed

in the flank of the mountain, a sort of cracking noise was heard internally, stones started out of the ground, detached fragments of rocks rolled down the mountain. At two o'clock, in the afternoon of the second of September, a large rock became loose, and in falling raised a cloud of black dust. Toward the lower part of the mountain, the ground seemed pressed down from above, and when a stick or a spade was driven in, it moved of itself. A man who had been digging in his garden, ran away from fright, at these extraordinary appearances; soon, a fissure, larger than all the others, was observed; insensibly it increased, springs of water ceased all at once to flow; the pine-trees of the forest, absolutely reeled; birds flew away, screaming. A few minutes before five o'clock, the symptoms of some mighty catastrophe, became still stronger; the whole surface of the mountain seemed to glide down, but so slowly as to afford time to the inhabitants to go away. An old man, who had often predicted some such disaster, was quietly smoking his pipe, when told by a young man, running by, that the mountain was in the act of falling; he arose, and looked out, but came into his house again, saying he had time to fill another pipe. The young man continuing to fly, was thrown down several times, and escaped with difficulty; looking back, he saw the house carried off all at once.

Another inhabitant, being alarmed, took two of his children and ran away with them, calling to his wife to follow with the third; but she went in for another who still remained (Marianna, aged five); just then, Francisca Ulrich, their servant, was crossing the room with this Marianna, whom she held by the hand, and saw her mistress; 'At that instant,' as Francisca afterward said, 'the house appeared to be torn from its foundation, (it was of wood) and spun round and round like a teetotum; I was sometimes on my head, sometimes on my feet, in total darkness, and violently separated from the child.' When the motion stopped, she found herself jammed in on all sides, with her head downward, much bruised, and in extreme pain. She supposed she was buried alive, at a great depth; with much difficulty, she disengaged her right hand, and wiped the blood from her eyes. Presently, she heard the faint moans of Marianna, and called her by her name; the child answered that she was on her back, among stones and bushes, which held her fast, but that her hands were free, and that she saw the light, and even something green. She asked whether people would not come to take them out. Francisca answered, that it was the day of judgment, and that no one was left to help them, but that they would be released by death, and be happy in heaven. They prayed together. At last, Francisca's ear was struck by the sound of a bell, which she knew to be that of Steinenberg; then seven o'clock struck, in another village, then she began to hope there were still living beings, and endeavored to comfort the child. The poor little girl was at first clamorous for her supper, but her cries soon became fainter, and at last quite died away. Francisca, still with her head downward, and surrounded with damp earth, experienced a sense of cold in her feet, almost insupportable. After prodigious efforts she succeeded in disengaging her legs, and thinks this saved her life. Many hours had passed in this situation, when she again heard the voice of Marianna, who had been asleep, and now

renewed her lamentations. In the meantime, the unfortunate father, who, with much difficulty, had saved himself and two children, wandered about till daylight, when he came among the ruins to look for the rest of his family. He soon discovered his wife, by a foot which appeared above ground; she was dead, with a child in her arms. His cries, and the noise he made in digging, were heard by Marianna, who called out. She was extricated with a broken thigh, and saying that Francisca was not far off, a farther search led to her release also, but in such a state that her life was despaired of; she was blind for some days, and remained subject to convulsive fits of terror. It appeared that the house, or themselves at least, had been carried down about one thousand five hundred feet from where it stood before.

In another place, a child, two years old, was found unhurt, lying on its straw mattress upon the mud, without any vestige of the house from which he had been separated. Such a mass of earth and stones rushed at once into the Lake of Lowertz, although five miles distant, that one end of it was filled up, and a prodigious wave passing completely over the island of Jehwanau, seventy feet above the usual level of the water, overwhelmed the opposite shore, and as it returned, swept away into the lake many houses with their inhabitants. The village of Siewen, situated at the farther end, was inundated, and some houses washed away, and the flood carried live fish into the village of Steinen. The chapel of Olten, built of wood, was found half a league from the place it had previously occupied, and many large blocks of stone completely changed their position.

The most considerable of the villages overwhelmed in the vale of Arth, was Goldau, and its name is now affixed to the whole melancholy story and place. I shall relate only one more incident: A party of eleven travelers, from Berne, belonging to the most distinguished families there, arrived at Arth, on the second of September, and set off on foot for the Righi, a few minutes before the catastrophe. Seven of them had got about two hundred yards a-head—the other four saw them entering the village of Goldau, and one of the latter, Mr. R. Jenner, pointing out to the rest the summit of the Rossberg, (full four miles off in a straight line) where some strange commotion seemed taking place, which they, themselves, (the four behind) were observing with a telescope, and had entered into conversation on the subject, with some strangers just come up; when, all at once, a flight of stones, like cannon balls, traversed the air above their heads; a cloud of thick dust obscured the valley; a frightful noise was heard. They fled! As soon as the obscurity was so far dissipated as to make objects discernible, they sought their friends, but the village of Goldau had disappeared under a heap of stones and rubbish, one hundred feet in height, and the whole valley presented nothing but a perfect chaos! Of the unfortunate survivors, one lost a wife, to whom he was just married, one a son, a third the two pupils under his care. All researches to discover their remains, were, and have ever since been, fruitless. Nothing is left of Goldau, but the bell which hung in its steeple, and which was found about a mile off. With the rocks, torrents of mud came down, acting as rollers; but they took a different direction when in the valley, the mud following the slope of the ground toward the Lake of

Lowertz, while the rocks, preserving a straight course, glanced across the valley toward the Righi. The rocks above, moving much faster than those near the ground, went farther, and ascended even a great way up the Righi; its base is covered with large blocks, carried to an incredible height, and by which trees were mowed down as they might have been by cannon."

The people of Goldau are said to have possessed such interesting qualities of person and manners, such purity and simplicity of domestic life, as well corresponded with the loveliness of their native village, and its surrounding scenery. How strange and awful seems, under such circumstances, the transition from time into eternity!

CHAPTER II.

VALLEY of Chamouni—Swiss Peasantry—the Mer de Glace—Fate of a Danish Traveler—Ice Caverns—Alpine Oasis—Excursion to the Hospice of St. Bernard—Dogs of St. Bernard—Passage of Napoleon's Army—Benevolence of the Monks—the House of the Dead—Terrors of the Splügen Pass—De Saussure's Ascent of Mont Blanc—Magnificent Exhibition.

It was early one fine summer morning that Dr. J. P. Durbin and party, left Geneva for the far-famed vale of Chamouni, at the base of Mont Blanc. Their road followed the windings of the Arve, through a wild and picturesque country. In a few hours, the roughness of the road compelled them to change their carriage for a kind of settee, on wheels, called *chars à banc*. The scenery became more and more wild, and on all sides arose gigantic Alps, shrouded in mists, which occasionally partially dispersed, and disclosed their lofty pinnacles piercing the skies.

In the valley of the Arve, a few peasants' dwellings were occasionally passed. These were low stone cottages, surmounted by wooden attics, and with small windows barred with iron. Under their wide projecting eaves, were heaped piles of wood, and often large ovens were seen, where the bread of a whole neighborhood was baked semi-weekly, as is the custom of these regions. They saw women mowing in the fields, who wielded their scythes as easily, and cut as broad a swath as the most expert men.

At Chamouni, they passed the succeeding day, in gazing at the beauty and the sublimity of the Alpine world—at the green fields of this charming vale, the sombre evergreen forests, at the bases of the mountains, the picturesque cottages and hamlets, above all which, rose, robed in eternal ice and snow, the lofty summits of giant mountains.

On the 7th of July, the party made an excursion to the "Mer de Glace," or sea of ice, an enormous glacier, situated far up the mountains. It is twenty-five miles long, and two and a half broad, and from the side of Mont Blanc, descends slopes and through ravines.

After breakfast they started on mules, proceeding along in single files, and accompanied by their guide, and a boy with iron-pointed ice-pikes. When half way to the glacier they turned to gaze back at the valley they had left, when they saw the fields of grain dwindled to the apparent size of the squares of a chess board, the dwellings to little toy houses, which the Arve

wound between like a little silver thread. On the opposite, and northern side of the valley, the mountains appeared to bound the world, for further on, all was sky, save where miles and miles distant, one gigantic Alp shot far up heavenward its pale blue crest.

An hour more, and they were partaking of rest and refreshment at a little pavilion in the mountain, and then again, in high spirits, started off on foot, with pikes in hand. But they had no idea of the difficulties before them. In places, they were obliged to edge along on narrow ledges of rock, scarce two inches wide, while above rose, for thousands of feet, lofty ledges of rock, and below, yawned deep and awful chasms. The "Mer de Glace" was at length reached; but instead of being a sea of smooth, hard ice, it was found to be mostly frozen slush. In spots it was solid ice, and in other places snow had filled up the chasms in its surface. It is frequently difficult to distinguish the solid ice from the treacherous snow. Once a Danish traveler, heedless of the warning of his guide, while on a glacier, slipped into a chasm, and was seen no more.

The chasms descend to great depths. The heat of the earth, and running water enlarges them at their bases into immense connecting caverns. On one occasion Professor Hugi, entered some of these caverns by the dried up bed of a rivulet, where he wandered about for hours, in places walking upright, and in others compelled to crawl through narrow fissures. Everywhere a faint light penetrated, and water continually dripped upon him from icicles. The celebrated Saussure, sunk shafts several hundred feet in depth into a glacier in a fruitless attempt to ascertain its thickness.

With four or five hours' more labor they came to a little Alpine oasis, which retained its verdure amid surrounding snow and ice, at an elevation of over 8,000 feet. Here the grass was green and soft, and wild flowers bloomed; these had been warmed into life by the rays of the sun, collected by encircling rocks, and then reflected and concentrated upon this little spot. Directly before them stood Mont Blanc, the giant of the Alps, its white, snowy head shooting far up into the blue sky. Between them and the mountain, and laying upon its side, was the "Mer de Glace," with its gaping chasms and pyramids of blue tinted ice. "Never," says Dr. Durbin, "had I such a conception of the *wonderful power of God*, as when standing in the midst of this Alpine world."

Having returned to Chamouni, the party, on the second morning, left for the celebrated Pass of the Great St. Bernard, elevated eight thousand feet above the level of the sea. The second day, they passed through Liddes, beyond which point vegetation disappeared; deep beds of snow were met with, and all around was enshrouded in wintry desolation. Continuing on, they passed by a plain wooden cross, and soon after, met two of the noble, and far-famed dogs of St. Bernard, who gazed at them with looks full of mildness and benevolence. At three o'clock that same afternoon, the summit of the pass was reached, and before them stood the object of their journey, the Hospice, the most lofty human habitation in all Europe.

Through the Pass of the Great St. Bernard, the Roman legions, two thousand years ago, used to defile while crossing the Alps, in their military

expeditions against the Gothic barbarians of the North. It is noted, in our times, by the famous passage of Napoleon's army of reserve, 60,000 strong, when on its way to the bloody field of Marengo. Their hundred pieces of artillery were placed in trees hollowed out, and each were drawn over the mountain steeps, by the united strength of a hundred soldiers.

On a level spot, on the summit of the Pass, stands the Hospice, founded at a very early period, for the comfort and safety of travelers, in their perilous passages over the mountains. In 962, it was re-established by St. Bernard, and has been continued from that day to this, a period of nearly a thousand years. About a dozen monks of the Augustin order, generally reside here. They bind themselves by a vow to remain fifteen years, yet so severe and intense is the cold, that they seldom live much over half that time. What a praiseworthy design! What noble self-denial!

Every morning, in winter, a monk and a servant descend the mountains in every direction, to hunt for travelers, who have been overtaken, and lost amid storms of snow, to carry them to the Hospice, and minister to their wants. Each monk and servant, is accompanied by one of the noble dogs of St. Bernard. These animals are of a tawny hue, large, and powerful, and unequalled for sagacity and affectionateness of disposition. When they leave the Hospice on winter mornings, a small basketful of bread and wine, is placed around the neck of each for the benefit of any lost traveler that may be found. Some years since one of these dogs, in a single day, saved the lives of fifteen persons.

The unfortunate wayfarer frequently perishes, ere the aid of these benevolent monks can reach him. The bodies of such are conveyed to the *morgue*, or dead house, a small square stone building, where if not claimed, they remain, and in the lapse of years, gradually fall to pieces. "It never thaws, nor does corruption, or the worms of death ever invade the inmates of the cold charnel house of St. Bernard. It presented a fearful spectacle," says Dr. Durbin, "as we looked through the grated window; and I shall keep the image of it to my dying day. The cold earth floor was strewn with bones, and bodies half crumbled, which had fallen from their leaning posture by the wall. Others stood there as they had stood for years, and seemed to turn their ghastly gaze upon us; one especially, whose winding sheet, his only coffin, was yet perfect around him. But what clings most closely and sadly, is a mother and her infant. She had clasped her child to her bosom, drawn the skirts of her gown around it, pressed her hands firmly about its neck, then looked back over her shoulder as if for help, and died. There they stood before me just as they were found. With saddened hearts we turned away, and retraced our steps to the convent."

Visitors are entertained free of expense at the convent; but they generally consider it their duty to contribute to its support, a little box being placed for that purpose in the chapel. The traveler is greeted kindly at the door by a monk, and conducted to a cheerful apartment and fire within.

The monks proved very amiable and agreeable. Having partaken of a comfortable meal, and enjoyed an hour's chat by the fireside, they were conducted to their chambers, being soon ensconced in the clean white sheets of

the excellent beds of the Hospice, slept finely after the fatigue of the day. "Next morning," continues Dr. Durbin, "we rose early, in time to attend mass in the chapel. Within, the tones of the organ were sounding sweetly, while without, the wind was howling over the snow-clad mountains, as it does on the wild December nights at home. How beautiful it was—the worship of God on this dreary mountain top! I *felt* its beauty, as I listened to those deep organ tones, and heard the solemn chant of the priests in the mass; and I honored in my heart these holy men, who devote themselves to this monotonous and self-denying life, in order to do good in the spirit of their master, to the bodies and the souls of men. Nor did I honor them the less that they were Romanists and monks of St. Augustin; for well I know that for a thousand years, Romanists and monks of St. Augustin had done the good deeds that they were doing, and that, when none else could do them. A man must be blinded indeed by prejudice, or bigotry, that cannot see the monuments of Catholic virtue, and the evidences of Catholic piety in every country in Europe; and worse than blind must he be, that will not acknowledge and honor them when he does see them."

Where'er we roam—along the brink
Of Rhine, or by the sweeping Po,
Through Alpine vale or champaign wide,
What'er we look on, at our side
Be *charity*! to bid us think,
And feel, if we would know."

Beside the St. Bernard, the Simplon, and the Splugen are the most celebrated of any of the Alpine passes, on this frontier. That of the Splugen seems to be shrouded in more absolute terrors than any in Switzerland.

"The passage of the French general, Macdonald, at the perilous gorge of the Cardinell in the Splugen, was made in the most terrific of seasons. Through this terrific chasm, at the will of Napoleon, he undertook a five days' fight with the elements. It was winter and storm, but there was no retreating. He advanced with his army in the face of a cannonade of avalanches, on the brink of unfathomable abysses, where many a score of despairing men, and struggling horses, buffeted and blinded by the wings of the tempest, and wrapped in a winding sheet of ice and snow, were launched off by the crashing mountain masses, and buried forever. Over this gorge, the avalanches hang, balanced and brooding, so that a whisper may precipitate them.

In the passage of Macdonald's army through this frightful region, it is a wonder that whole regiments were not buried at once. The amazement is, that passing in a winter's storm, with avalanches repeatedly shooting through these columns, so large a portion of the army escaped, not more than a hundred men and as many horses being lost. One of the drummers of the army having been shot in a snow bank from the avalanche into the frightful gulf, and having struggled forth alive, but out of sight and reach of his comrades, was heard beating his drum for hours in the abyss, vainly expecting rescue. Poor fellow! the roll of his martial instrument had often roused

his fellow soldiers with fierce courage to the attack, but now it was his own funeral march that he was beating, and it sounded like a death-summons for the whole army into this frightful bade, if another avalanche should thunder down. There was no reaching him, and death, with icy fingers, stilled the roll of the drum, and beat out the last pulsation of hope and life in his bosom ! Macdonald was still struggling on to Marengo. The army suffered more from fatigue and terror in the passes than in all their battles. Had they perished in the gorge of the Cardinell, the victory at Marengo would, perhaps, have been changed into a defeat, which, of itself, might have changed the whole course of modern history."

The summit of Mont Blanc, the giant of the Swiss mountains, is so difficult of access, that it is only within the memory of some now living, that its perils have been overcome. The earlier attempts, by different persons, to climb to its summit, are described by De Saussure. He himself only succeeded in the attempt, after repeated failures.

The first mountaineers, who had advanced to a great height in the chase of the chamois, entered, in 1775, into a valley of ice, closely shut in by high snow banks, and having a narrow passage open at the further extremity. The thinness of the air at this great height, added to the reflection of the sun on the snow, and the absence of circulation of the atmosphere in the narrow valley, caused so suffocating a heat, that, on observing the black color of the sky—a phenomenon usual at great elevations—through the opening at the end of the valley, they were seized by a panic fear, and turned back to Chamouni. They imagined they had seen the entrance of some awful gulf, or of the infernal regions.

On the eighth of June, 1786, two separate parties of guides had resolved on exploring these solitudes : one man, Jacques Balmat, presented himself without invitation, and followed a party against their will. The expeditions did not succeed, and as a storm of snow and hail had set in, those who had composed them set out on their return home. Jacques Balmat, being on unfriendly terms with the others, kept aloof, and finally quitted them to search for some crystals, under a rock at some distance. On attempting to rejoin them, he lost their trace, and the storm having come on, resolved to spend the night alone in the midst of the desert, rather than expose himself to the dangers of a solitary descent, in the darkness. He waited, patiently, under the rock, in spite of his suffering from the cold and hail. At sunrise, the weather cleared up, and he resolved to devote the day to the exploration of these vast and unknown solitudes. His perseverance was rewarded, for, by dint of research, he arrived alone on the summit of Mont Blanc, by a road which all succeeding travelers have followed, and which is certainly the only practicable one.

Upon his return to Chamouni, Balmat made no mention of his success, but having heard that Dr. Paccard was about to make an attempt, he communicated the secret, and offered to guide him to the summit. In consequence, he and Paccard arrived there in August, 1786. De Saussure, who resided at Geneva, was informed of this on the morrow, and set out immediately for the spot, but a succession of bad weather during all the autumn prevented his ascent.

The next year, on the first of August, De Saussure formed a caravan of eighteen guides, furnished with provisions, poles, ropes, ladders, and scientific instruments. They left Chamouni at seven o'clock in the morning, spent their first night on the summit of the mountain of Cote, to which point the excursion is always easy; beyond, it is nothing but ice and snow, and full of danger.

The next morning, although all were eager to start, some difficulties arose amongst the guides, in the arrangement and division of their loads. The fatigue of the burden they cared not for, but they feared that the accumulated weight would sink them through the snow into some hidden chasm. They soon got on to the glacier of the Cote, and there became entangled in a labyrinth of peaks of ice, separated by chasms of great depth. Some of these were very broad and open. In such cases, they had to descend to the bottom, and again ascend the other side, by stairs, cut with a hatchet in the ice. Often, on arriving at the bottom of such places, they found themselves surrounded with almost perpendicular walls of ice, and it seemed nearly impossible for them to escape from their icy prison. In other cases, these awful chasms were concealed by mere crusts of snow, over which they were obliged to pass. These intrepid guides, whose lives had been spent among the fearful dangers of the mountains, so long as they walked on the ice, though ever so narrow the ridges, or slanting the declivities, moved with firm and steady tread; they laughed, talked, and defied each other, in jest, but when they passed over those slight roofs of snow, suspended across deep chasms, the most profound silence was observed; the three first, tied together by a cord, at spaces six or eight feet apart; the others two by two, each holding by the end of a long stick, their eyes fixed on their feet, each endeavoring to place lightly and exactly, his foot in the steps of the one who had gone before. It was at a spot of this description, that one of them, Marie Coutel, narrowly escaped being lost. He had, with two others, been sent on to reconnoiter. Suddenly, the snow gave way beneath him, disclosing an awful abyss, to which was seen neither bottom nor sides, and all that saved him was the cord that held him dangling in the air, between his comrades!

In places, their course lay along a narrow projecting shelf of ice, where, on the one side, rose a lofty wall of mingled ice and snow, and on the other, sunk an icy precipice. In such spots, a single slip of the foot on the treacherous material, would suffice to send the adventurous traveler a crushed corpse, upon the granite-like ice, hundreds of feet below. De Saussure, on these occasions, took a careful survey of the dangers, that he might accustom himself to them, for in advancing, it was impossible for him to place his feet properly, without first looking at the precipice; and if this awful sight was taken unawares, the danger he knew was imminent, of his being paralyzed by fear, and thus losing his life. He advanced over these places, holding on to the center of a long, straight stick, between him and the wall, each end of which, was held by a guide.

As they advanced high up the mountain, they all suffered extremely from the rarity of the air. At the close of the second day, they had reached the Dôme du Gouté, 11,970 feet above the level of the sea. Here they stopped

to pass the night. They had long and serious deliberations, respecting the precise place they should select to pitch the tent they had brought with them. Beside the cold, they had two dangers to guard against, one from above, the other from below—the avalanches, and abysses concealed by superficial snow. The guides trembled at the thoughts of the snow, loaded with the weight of nineteen men, collected in a small space, and softened by the heat of their bodies, melting, and giving away all of a sudden, and swallowing them, in the middle of the night; and from the appearance of the spot they first selected, their indications existed for this apprehension. Another, some few hundred feet distant, seeming to be free from these dangers, the guides commenced excavating a place to pitch their tent; but they very soon felt the rarity of the air. Those robust men had scarcely thrown up five or six shovels of snow, when they found it impossible to continue, from the difficulty of breathing, and were obliged, continually, to relieve each other.

In high mountains, covered with snow, the halt, at the close of the day, is extremely painful. If you sit still you are frozen, and fatigue, joined to the thinness of the air, deprives one of the necessary strength to get warm by exercise. This was the situation of the party, who were impatient to get into the tent. When within it, their situation was not much bettered. The confined air created nausea, and made several of them very sick, and threw one of them into the most agonizing pain. This illness caused in them an ardent thirst, which they could only satisfy by melting snow, in a chafing-dish, a slow process for supplying so many persons.

The night was beautiful. The moon shone with a brilliancy unknown to the inhabitants of the lower world, from out the middle of a sky, dark as ebony. Jupiter shot forth rays of light from behind the loftiest summit of Mont Blanc, and the reflected light from over this vast extent of snow, was so dazzling, that only the largest stars were visible. In the night, just as they began to sleep, they were aroused by the thunder of an avalanche. It was late when they set out the next morning. On all sides scarce anything was to be seen but snow. This was of a dazzling whiteness, and formed a singular contrast with the almost black sky, always found on such high regions.

As they advanced, the increasing rarity of the air became very painful, and they were obliged to stop and rest every thirty or forty paces. They had not gone far, before they came to the avalanche, which had fallen the night before. Here they all stopped to rest their lungs and limbs, in hopes of crossing it quickly; but in this they were deceived. The sort of weariness which proceeds from this cause, is absolutely insurmountable. When at its height, the most imminent peril fails to increase one's speed. But De Saussure infused fresh courage into his guides, by repeatedly telling them that this place was really the least dangerous, because all the loose snow of the heights above, had already come away.

As they neared the summit, their strength visibly failed; they could only go fifteen or sixteen steps without stopping to take breath. De Saussure, every now and then, felt a sort of fainting, which obliged him to sit down, but as he recovered his respiration, his strength returned, and he then seemed

as if he could get to the top at one stretch. All the guides were similarly affected, in proportion to their strength. From this cause, their progress was continually slower and slower; but at eleven o'clock, they had gained the summit.

"My first looks," says De Saussure, "were fixed on Chamouni, (about seven miles distant, in a straight line) where I knew my wife and her two sisters were, with a telescope, anxiously following all our steps. I felt pleased when I saw the flag hoisted, the promised signal the moment they saw me on the summit." He was easily distinguishable from his companions, as he wore on this occasion, a cocked hat, trimmed with gold lace, and a dress of bright scarlet.

"I could now enjoy," continues De Saussure, "without regret, the grand spectacle I had under my eyes. I could hardly believe my senses, it appeared to me like a dream, when I saw below me those majestic summits, whose bases even, had been, for me, of such difficult and dangerous access. I seized their relation to each other, their connection, their structure, and a single glance cleared up doubts that years of labor had not been able to dissolve.

During this time, my guides pitched my tent, and set out the little table on which I meant to make the experiment of the boiling of water. But when it was necessary for me to dispose of my instruments, and observe them, I found myself every moment obliged to suspend my work, and attend only to my respiration. If it is considered, that the air had little more than half of its ordinary density, it may be seen, that it was necessary to supply it by the frequency of inspirations. When I was perfectly quiet, I felt only a slight pain at my breast; but when my attention was fixed continuously, for some moments, I was obliged to rest to recover myself again. My guides felt the same sensations. They had no appetite; and to say the truth, our provisions, which were all frozen, were not in a state calculated to excite one; neither did they care for wine, or brandy; indeed, they had found that strong liquors increased this disposition, without doubt, by increasing the circulation."

De Saussure, in his narrative of his ascent, fails to describe the wonderful pictorial phenomena, he could not but have witnessed. Although celebrated for his scientific talents, it excites our pity to discover that his mind was utterly destitute in that appreciation of the beautiful and the sublime in nature, the possession of which, even to the humblest peasant, at times, imparts such exquisite delight, and the exhibitions of which, are not among the least of the bounties bestowed by a kind Providence, to cheer the pilgrimage of man, and to lift his thoughts above the monotony of common life. Not so with a late traveler, an Englishman, eminent in literature, who accomplished the ascent in the summer of 1851, and who, to the keenest appreciation of the most ethereal, delicate, manifestations of beauty in natural objects, unites the power of describing them, only less vivid than reality, because words are ever less vivid than life. His description of sunset on Mt. Blanc, is one of the most exquisite word-paintings we have ever seen, conveying to the imagination such transcendent views of the evanescent, changing glories of the scene, that it appears like a glimpse into that mysterious unknown, where "the eye

hath not seen, nor the ear heard, nor the heart of man conceived," of the visions of beauty, that awaiteth the coming of the faithful. We unfold it to the view of the reader, and thus close our article on Switzerland.

"The sun, at length, went down behind the Aiguille du Goûté, and then, for two hours, a scene of such wild and wondrous beauty—of such inconceivable unearthly splendor—burst upon me, that, spell-bound and almost trembling with the emotion its magnificence called forth,—with every sense, and feeling, and thought, absorbed by its brilliancy, I saw far more than the realization of the most gorgeous visions that opium, or *hashees*, could evoke, accomplished. At first, everything about us—above, around, below—the sky, the mountain, and the lower peaks—appeared one uniform creation of burnished gold, so brightly dazzling that the eye could scarcely bear the splendor. As the twilight gradually crept over the lower world, the glow became still more vivid; and presently, as the blue mists rose in the valleys, the tops of the higher mountains looked like islands rising from a filmy ocean—an archipelago of gold. By degrees, this metallic luster was softened into tints,—first orange, and then bright transparent crimson, along the horizon, rising through the different hues with prismatic regularity, until, immediately above us, the sky was a deep, pure blue, merging toward the east into glowing violet. The snow took its color from these changes; and every portion on which the light fell, was soon tinged with pale carmine, of a shade similar to that which snow at times assumes, from some imperfectly explained cause, at high elevations—such, indeed, as I had seen in early summer, upon the Furka and Faulhorn. These beautiful hues grew brighter, as the twilight below increased in depth; and it now came marching up the valley of the glaciers, until it reached our resting-place. Higher, and higher still, it drove the lovely glory of the sunlight before it, until the vast Dôme de Goûté, and the summit, itself, stood out, ice-like, and grim, in the cold evening air, although the horizon still gleamed with a belt of rosy light."

